

**DRAWING AMENDMENTS**

In the interests of expediting prosecution of the instant application, and without admission that any amendment is necessary, the Applicants have amended the drawings, specifically Fig. 3a, to remove the alleged new matter. The Applicants aver that no new matter has been introduced. A replacement sheet containing the aforementioned figure is submitted concurrently herewith.

**REMARKS**

Claims 1, 2, 4-7, 10, 12-15 and 17-20 are pending.

Claims 1, 2, 4-7, 10, 12-15 and 17-20 stand rejected.

Claims 3, 8, 9, 11, and 16 have been previously canceled, without prejudice.

Claims 1, 4, 17 and 19 have been amended. Support for these amendments can be found throughout the specification and drawings, as originally filed.

The drawings have been amended, specifically Fig. 3a, to remove the alleged new matter. The Applicants aver that no new matter has been introduced. A replacement sheet containing the aforementioned figure is submitted concurrently herewith.

This response is submitted in response to a final office action and is deemed to place the application in a condition for allowance, or alternatively, in better condition for appeal.

The Applicants wish to express their appreciation to the Examiner for the courtesies extended to the Applicants' attorney, Preston Smirman, during a telephonic interview held on October 20, 2006.

**STATEMENT OF THE SUBSTANCE OF THE INTERVIEW**

The substance of the interview is as follows: the Applicants agreed to submit a new Fig. 3a without the new matter of the shown apertures of present Fig. 3a to eliminate the new matter rejections and objections. The prior art of Happonen et al., Sundstrom, and Latulippe et al. was discussed. The Applicants indicated the features of the non-springing properties of the device were critical. The Examiner maintained that the planar structures to Happonen et al. and Latulippe et al. were not springy, but relatively rigid. The Applicants presented the argument that the screws are loosely held. At the present, the bone screws are not part of the claimed structure and at this point can not distinguish structure to the claimed structure. The relative tightness of securement of the screws would need consideration if the screws are actually included in the claimed structure. The feature of multiple size heads in a single sized recess was not specifically set forth and requires further consideration and search. The feature of a second plate as set forth in claim 10, as much as disclosed in the specification, was not found in the prior art of

record. Absent a teaching commensurate with claim 10 as it now exists, such would be allowable.

### **35 USC §132(a) OBJECTION**

The amendment filed August 11, 2006 stands objected to under 35 U.S.C. §132(a) because it allegedly introduces new matter into the disclosure.

The Applicants respectfully traverse the 35 U.S.C. §132(a) objection.

In the interests of expediting prosecution of the instant application, and without admission that any amendment is necessary, the Applicants have amended the drawings, specifically Fig. 3a, to remove the alleged new matter. The Applicants aver that no new matter has been introduced. A new sheet containing the aforementioned figure is submitted concurrently herewith.

### **35 USC §112, FIRST PARAGRAPH REJECTION**

Claim 10 stands rejected under 35 U.S.C. §112, first paragraph, because the specification, while being enabling for the existence of a second plate, allegedly does not reasonably provide enablement for what this comprises in the context of the claimed invention.

The Applicants respectfully traverse the 35 U.S.C. §112, first paragraph rejection of claim 10.

In the interests of expediting prosecution of the instant application, and without admission that any amendment is required, the Applicants have provided amended Fig. 3a, which clearly depicts the second plate in relation to the first plate, which was fully described in the summary of the invention section of the originally-filed specification at paragraph [0013].

Accordingly, the Applicants contend that the 35 U.S.C. 112, first paragraph rejection of claim 10 has been overcome.

**35 USC §103(a) REJECTION**

Claims 1, 2, 4-7, 12-15 and 17-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 7,007,798 to Happonen et al. in view of U.S. Patent No. 6,974,030 to Sundstrom.

The Applicants respectfully traverse the 35 U.S.C. §103(a) rejection of claims 1, 2, 4-7, 12-15 and 17-20.

The standard for obviousness is that there must be some suggestion, either in the reference or in the relevant art, of how to modify what is disclosed to arrive at the claimed invention. In addition, "[s]omething in the prior art as a whole must suggest the desirability and, thus, the obviousness, of making" the modification to the art suggested by the Examiner. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 U.S.P.Q.2d (BNA) 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988). Although the Examiner may suggest the teachings of a primary reference could be modified to arrive at the claimed subject matter, the modification is not obvious unless the prior art also suggests the desirability of such modification. *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q.2d (BNA) 1397, 1398 (Fed. Cir. 1989). There must be a teaching in the prior art for the proposed combination or modification to be proper. *In re Newell*, 891 F.2d 899, 13 U.S.P.Q.2d (BNA) 1248 (Fed. Cir. 1989). If the prior art fails to provide this necessary teaching, suggestion, or incentive supporting the Examiner's suggested modification, the rejection based upon this suggested modification is error and must be reversed. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d (BNA) 1566 (Fed. Cir. 1990).

The law is also clear that a claim in dependent form shall be construed to incorporate all the limitations of the claim to which it refers. 35 U.S.C. 112, fourth paragraph.

In the interests of expediting prosecution of the instant application, and without admission that any amendment is required, the Applicants has amended claim 1 to recite, among other things, a system for keeping ready bone screws, comprising: (1) a plurality of bone screws; (2) a keeping-ready device for the bone screws, wherein the keeping-ready device has a surface with a plurality of orifices for inserting the bone screws and the keeping-ready device allows inserted bone screws to be kept ready loosely and

countersunk in relation to the surface, wherein each orifice includes a first shoulder portion having a first diameter and a second shoulder portion having a second diameter, wherein the first and second diameters are not equal; and (3) a removal instrument for removing a kept-ready bone screw from the keeping-ready device, wherein the removal instrument is dimensioned such that it is insertable into one of the orifices for removal of a kept-ready bone screw, wherein the bone screws include different head shapes, wherein the heads of the bone screws are operable to rest upon either one of the first or second shoulder portions, wherein the orifices are arranged in the surface in a plurality of rows, wherein the surface has a thickness wherein the ratio of area to thickness is chosen such that the surface has no or only slightly springing properties.

In the interests of expediting prosecution of the instant application, and without admission that any amendment is required, the Applicants has amended claim 4 to recite, among other things, a keeping-ready device for bone screws, comprising: (1) a plurality of bone screws having different head shapes; and (2) a surface in which a plurality of orifices for inserting the bone screws is provided, wherein the keeping-ready device allows inserted bone screws to be kept ready loosely and countersunk in relation to the surface, wherein each orifice includes a first shoulder portion having a first diameter and a second shoulder portion having a second diameter, wherein the first and second diameters are not equal, the surface including a first plate having a plate area in which the orifices are provided in a plurality of rows, wherein the first plate has a plate thickness wherein the ratio of area to thickness is chosen such that the first plate has no or only slightly springing properties, wherein the heads of the bone screws are operable to rest upon either one of the first or second shoulder portions.

In the interests of expediting prosecution of the instant application, and without admission that any amendment is required, the Applicants has amended claim 17 to recite, among other things, a device for keeping bone screws ready, the bone screws having bone screw heads and the device comprising: (1) a plurality of bone screws having different head shapes; and (2) a surface in which orifices are provided for loosely keeping-ready the bone screws with countersunk bone screw heads in relation to the surface, the orifices having walls that act as a guide for a removal instrument for the bone screws when the removal instrument is inserted into one of the orifices, wherein each

orifice includes a first shoulder portion having a first diameter and a second shoulder portion having a second diameter, wherein the first and second diameters are not equal, the surface including a plate having a plate area in which the orifices are provided in a plurality of rows, wherein the plate has a plate thickness wherein the ratio of area to thickness is chosen such that the plate has no or only slightly springing properties, wherein the heads of the bone screws are operable to rest upon either one of the first or second shoulder portions.

In the interests of expediting prosecution of the instant application, and without admission that any amendment is required, the Applicants has amended claim 19 to recite, among other things, a device for keeping bone screws ready, the bone screws having bone screw heads and the device comprising: (1) a plurality of bone screws having different head shapes; and (2) a surface in which a plurality of orifices for inserting the bone screws is provided, wherein the orifices have portions of a reduced inner diameter for cooperating with bone screw heads and wherein the portions of reduced inner diameter are placed such that the bone screw heads are kept ready loosely and countersunk in relation to the surface, wherein the portions of reduced inner diameter include a first shoulder portion having a first diameter and a second shoulder portion having a second diameter, wherein the first and second diameters are not equal, wherein the bone screws include different head shapes, wherein the orifices are arranged in the surface in a plurality of rows, wherein the surface has a thickness wherein the ratio of area to thickness is chosen such that the surface has no or only slightly springing properties, wherein the heads of the bone screws are operable to rest upon either one of the first or second shoulder portions.

Neither Happonen et al. or Sundstrom suggest any such system or device of the present invention, as claimed in any of independent claims 1, 4, 17 or 19, or the claims dependent therefrom.

In contradistinction to the above-recited independent claims, Happonen et al. teaches that the screws are disposed in a single row of orifices, as opposed to a plurality of rows as presently claimed, and furthermore, Happonen et al. also teaches that the head portion of the screw is tightly engaged against a portion of the orifice wall, e.g., as shown in Fig. 1b and described in column 3, lines 38-42, as opposed to being loosely received in

the orifice as presently claimed. Thus, while Happonen et al. arguably discloses orifices with two shoulders, the head of the screw can only engage an area near one of the shoulders. In fact, the heads of the screws of Happonen et al. actually never “rest upon” any of the shoulders of the orifice, as presently claimed, but rather are lodged against an inner diameter of the orifice. Furthermore, while Happonen et al. discloses that screws of differing “size” can be employed, it is silent with respect to differing head shape; i.e., it appears that Happonen et al. was referring to shank length and not head shape as there is not any discussion of varying the dimensions of the orifices to simultaneously accommodate differing head shape screws. Accordingly, the orifices of Happonen et al. cannot concurrently accommodate screws of differing head shapes.

The recitation of Sundstrom does not cure the deficiencies in the teachings of Happonen et al. While Sundstrom may arguably disclose rows or grids of fasteners, it only discloses an orifice with a single shoulder portion and the screws (which are construction screws, not bone screws) must be fairly rigidly contained (i.e., not loosely held or kept as presently claimed) within the form-stiff framework or else the screws would easily be dislodged.

Thus, one of ordinary skill in the art would not look to Happonen et al. and/or Sundstrom, either alone or in combination therewith, for guidance on a system or device for keeping bone screws ready, as presently claimed.

Because claim 1 is allowable over Happonen et al. and/or Sundstrom, either alone or in combination therewith, for at least the reasons stated above, claim 2, which depends from and further defines claim 1, is likewise allowable. Because claim 4 is allowable over Happonen et al. and/or Sundstrom, either alone or in combination therewith, for at least the reasons stated above, claims 5-7 and 12-15, which depend from and further define claim 4, are likewise allowable. Because claim 17 is allowable over Happonen et al. and/or Sundstrom, either alone or in combination therewith, for at least the reasons stated above, claim 18, which depends from and further defines claim 17, is likewise allowable. Because claim 19 is allowable over Happonen et al. and/or Sundstrom, either alone or in combination therewith, for at least the reasons stated above, claim 20, which depends from and further defines claim 19, is likewise allowable.

Accordingly, the Applicants contend that the 35 U.S.C. 103(a) rejection of claims 1, 2, 4-7, 12-15 and 17-20 has been overcome.

### **35 USC §103(a) REJECTION**

Claims 1, 2, 4-7, 12-15 and 17-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,394,983 to Latulippe in view of U.S. Patent No. 7,007,798 to Happonen et al.

The Applicants respectfully traverse the 35 U.S.C. §103(a) rejection of claims 1, 2, 4-7, 12-15 and 17-20.

Independent claims 1, 4, 17 and 19 have been amended as previously discussed above.

Neither Latulippe et al. or Happonen et al. suggest any such system or device of the present invention, as claimed in any of independent claims 1, 4, 17 or 19, or the claims dependent therefrom.

While Latulippe et al. arguably discloses a keeping ready device for bone screws including a row or grid layout, it is silent with respect to the structure and function of the orifice design. That is, Latulippe et al. is completely silent with respect to any multi-shouldered configuration of the orifices that would allow screws of varying head shape to be simultaneously accommodated in a plurality of orifices having the same dimensions. While Latulippe et al. discloses cavities that are sized and shaped to display a plurality of surgical components, it does not describe the cavities with any degree of detail, and thus cannot be said to describe the claimed features of the present invention. In fact, Latulippe et al. is so bereft of detail that one of ordinary skill in the art would not have any idea as to what the cavities look like, how the screws are received within the cavities, and/or what types or sizes of screws can be received within the cavities.

The recitation of Happonen et al. does not cure the deficiencies in the teachings of Latulippe et al.

As previously noted, Happonen et al. teaches that the screws are disposed in a single row of orifices, as opposed to a plurality of rows as presently claimed, and furthermore, Happonen et al. also teaches that the head portion of the screw is tightly engaged against a portion of the orifice wall, e.g., as shown in Fig. 1b and described in

column 3, lines 38-42, as opposed to being loosely received in the orifice as presently claimed. Thus, while Happonen et al. arguably discloses orifices with two shoulders, the head of the screw can only engage an area near one of the shoulders. In fact, the heads of the screws of Happonen et al. actually never “rest upon” any of the shoulders of the orifice, as presently claimed, but rather are lodged against an inner diameter of the orifice. Furthermore, while Happonen et al. discloses that screws of differing “size” can be employed, it is silent with respect to differing head shape; i.e., it appears that Happonen et al. was referring to shank length and not head shape as there is not any discussion of varying the dimensions of the orifices to simultaneously accommodate differing head shape screws. Accordingly, the orifices of Happonen et al. cannot concurrently accommodate screws of differing head shapes.

Thus, one of ordinary skill in the art would not look to Latulippe et al. and/or Happonen et al., either alone or in combination therewith, for guidance on a system or device for keeping bone screws ready, as presently claimed.

Because claim 1 is allowable over Latulippe et al. and/or Happonen et al., either alone or in combination therewith, for at least the reasons stated above, claim 2, which depends from and further defines claim 1, is likewise allowable. Because claim 4 is allowable over Latulippe et al. and/or Happonen et al., either alone or in combination therewith, for at least the reasons stated above, claims 5-7 and 12-15, which depend from and further define claim 4, are likewise allowable. Because claim 17 is allowable over Latulippe et al. and/or Happonen et al., either alone or in combination therewith, for at least the reasons stated above, claim 18, which depends from and further defines claim 17, is likewise allowable. Because claim 19 is allowable over Latulippe et al. and/or Happonen et al., either alone or in combination therewith, for at least the reasons stated above, claim 20, which depends from and further defines claim 19, is likewise allowable.

Accordingly, the Applicants contend that the 35 U.S.C. 103(a) rejection of claims 1, 2, 4-7, 12-15 and 17-20 has been overcome.

**CONCLUSION**

In view of the foregoing, the Applicants respectfully request reconsideration and reexamination of the Application. The Applicants respectfully submit that each item raised by Examiner in the Final Office Action of September 29, 2006 has been successfully traversed, overcome or rendered moot by this response. The Applicants respectfully submit that each of the claims in this Application is in condition for allowance and such allowance is earnestly solicited.

The Examiner is invited to telephone the Applicants' undersigned attorney at (248) 723-0487 if any unresolved matters remain.

Any needed extension of time is hereby requested with the filing of this document.

The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 08-2789 for this matter.

Respectfully submitted,

**HOWARD & HOWARD ATTORNEYS, P.C.**

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**November 22, 2006**

**Date**

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